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Site 6025 (Boreal Stand 25): Moose River, St. Louis County, Minnesota, Township 65N, Range 14W, Section 11. 1955-07-27

[s.l.]: [s.n.], 1955-07-27

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[Site 6025]

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 25

Name: *Moose River*County: *St. Louis*Date: *July 27, 1955*Size of Stand: *30 acres*Forest Type: *spruce-fir*Topography: *steeply rolling*Locality: *at spot on Echo trail where Moose R. crosses*T: *65N* R: *14W* Sec: *11*Observers: *PFM*

Size of Area Sampled:

Soil Type:

Slope:

Directions

*20' intervals**steep slope to NE to Moose R.*

Condition of Stand:

*Very few logs removed - at base + top of hill - avoided - part studied origin
on NE-facing slope which grades steeply to the Moose R. - small Bs bog at bottom
Stand slowly thinned by windblown because such a steep grade.
Very shallow soils on boulder outcrop or talus
Considerable blowdown on top of hill - stand severely thinned throughout by wind
Peculiar stand - with Bs on top of hill whereas ws concentrated on slope
Stand reported by Dr. Murray Buell.*

Open Grown Trees:

% Canopy:

Stumps:

1.	4.	7.	10.
2.	5.	8.	11.
3.	6.	9.	12.

Soil Data:

	pH	N	P	K	Ca	Mg	Org. Mat.	Colloids	W.H.C.
Ao									
A1									
A2									
B									

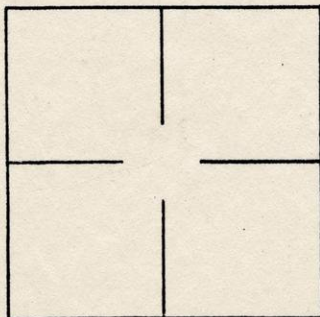
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

DEPTH	CHARACTERISTICS (Color, Texture, Structure, etc.)
<i>#1 2 litter</i> <i>5" 3-duff</i>	<i>#2 2 litter</i> <i>4 1/2" 2 1/2 duff</i>
<i>1/2" - black crumbly</i>	<i>1/2" - black crumbly</i>
<i>1" - black-brown leached</i>	<i>1 1/2" - black brown leached</i>
<i>6" + light-brown-grey</i> <i>clay loam</i>	<i>5" light brown-grey</i> <i>clay loam</i> <i>thin boulder</i>
	<i>#3 1 litter</i> <i>2" - 1 ferment</i> <i>1/4" - black</i> <i>1" - grey leached</i> <i>6" + sandy-brown</i> <i>- bright light brown</i>

Parent Material:

Map:



LICHENS OF GREAT LAKES SPRUCE-FIR COMMUNITIES
MINNESOTA

St. Louis County



20 miles N.W. of Ely - Moose River crosses
Echo Trail - T65N R14W SEC 11.

Balsam, w. spruce, w.birch, b.spruce & jack
pine. Steeply rolling, steep N.E. facing
slope. Considerable windthrow, shallow
soil on rock outcrop.

July 27, 1955. Coll. Paul F. Maycock

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

248.1

Spruce - fir
Northern Pine/Hardwoods

Station Number: 25 - 1642

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL.	F. % TRS.	% SUM F. TR.	D. % TRS.	DOM% TRS.	DFD INDEX	C. I.	N. Limit Index
			-80	-320	321											
1059.3 Mid Range Index 2.0 9.0 464.0 795.0 152.0 84.7 7.0 18.0 20.0 198.0 2809	Abies bals	37	84			3267	137	85.6		92.5	37.0	52.5	28.2	117.7	823.9	941.6
	Acer rubru						5	3.1							1.0	1.0
	A. sacchar															
	A. spicatu						3	1.9							1.0	1.0
	Betula lut															
	B. papyrif	18	20			1841	3	1.9		45.0	18.0	12.5	15.9	46.4	232.0	417.6
	Carpinus c															
	Fagus gran															
	Ostrya vir															
	Picea glau	25	35			3786	6	3.8		62.5	25.0	21.9	32.6	79.5	477.0	795.0
	Pinus Bank	7	7			879				17.5	7.0	4.4	7.6	19.0	19.0	152.0
	P. resinosa	3	3			831				7.5	3.0	1.9	7.2	12.1	36.3	72.6
	P. Strobus														1.0	1.0
	Populus ba															
	P. grandid	1	1			165				2.5	1.0	0.6	1.4	3.0	6.0	18.0
	P. tremulo	1	1			105				2.5	1.0	0.6	0.9	2.5	5.0	22.5
	Prunus pen															
	Quercus el															
	Q. rubra															
	Tilia amer															
	Tsuga cana															
	Thuja occi															
	Ulmus amer															
	U. fulva															
	Picea mar.	8	9			726	3	1.9		20.0	8.0	5.6	6.2	19.8	39.6	198.0
	Amelanchien						2	1.3								
	Alnus rug						1	0.6								
	TOTALS		160			11,600	160	100.0		250.0	100.0	100.0	100.0	300.0	1642	2620.3

AVE. DIST. BTW'N TREES:

9.7

AVE. B. A.:

72.5

TREES/ACRE:

463

DOM./ACRE:

33,568

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 25(1)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam		6' 24 10 1/2 52	4' 28	4 1/2 25 12 1/2 22	4' 42 5 1/2 33	6' 19	6 1/2 19 3 1/2 40	5' 58 19 1/2 23	12 1/2 16 8 1/2 85	7' 78 12 1/2 42
Acer rubrum		14 25			5 20 9 27			10 1/2 15		8' 18 17 20
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif	10' 29		12 1/2 81	15 74				11' 138		
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau	8 1/2 61 16' 147		23 96 16 92		13 34 12 1/2 169	7' 126		9' 44 7' 95		
Pinus Bank				3 1/2 104		7 92				
P. resinosa		11' 270								
P. Strobus										
Populus bals										
P. grand										
P. trem										
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Arceia manana	17' 65						8' 34			
Litter	1/2"	2"	1 1/2"	2"	1"	2 1/2"	1 1/2"	3"	4"	3"
Canopy	5'	15'	25'	30'	40'	50'	75'	55'	40'	2'
Distance	51 1/2	41 1/2	55 1/2	35 1/2	23 1/2	38 1/2	25'	36	37	44 1/2

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 25 (2)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	4 1/2 42	4' 20	1 1/2 25	8 1/2 30	7' 32	2 1/2 31	8' 35	12 1/2 50	10' 30	4' 20
Acer rubrum	16 1/2 21	3' 16	13 1/2 18	17' 24	5' 26	2 1/2 26	7' 20	10 35	5' 20	14 1/2 19
A. sacchar.	15' 34		10' 32	18' 22						14 1/2 19
A. spicatum										
Betula lut.										
B. papyrif						6 1/2 72	14' 96	4' 105		
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau	3' 59	10' 140	19' 115	11' 105	8 1/2 91		19' 112	8 1/2 41	16' 25	9 1/2 229
Pinus Bank		7' 137			6' 62	16' 87			3' 158	
P. resinosa										
P. Strobus										
Populus bals										
P. grand										
P. trem										
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Litter	1 1/2	1/2	1"	1 1/2	1"	3"	1 1/2	4"	3 1/2	4"
Canopy	65	55	45	15	40	65	10	40	25	70
Distance	29	24	33 1/2	34 1/2	26 1/2	27 1/2	48	35	34	32

Plant Ecology Research
TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

See Record

Station Number: 25 (3)

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL	F. % TRS	% SUM F. TR.	D. % TRS	DOM% TRS	DFD INDEX	C. I.
			-80	-320	321										
Abies bals			8 1/2 35	18 26	11 1/2 25	9 65	4 38	12 1/2 86	7 42	10 37			3 1/2 28		
Acer rubru			13 18			4 36	9 18		6 1/2 29	4 1/2 52			10 22		
A. sacchar							7 26			12 1/2 60			7 1/2 24		
A. spicatu															
Betula lut															
B. papyrif			5 1/2 105	18 125	13 120						10 1/2 12	3 108	11 1/2 51		
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau								8 1/2 121	9 175	7 15	8 1/2 75	10 138	9 1/2 65		
Pinus Bank					20 125								13 1/2 56		
P. resinosa								1 1/2 376							
P. Strobus															
Populus ba															
P. grandid					20 115										
P. tremulo											11 1/2 105				
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Picea mar											7 1/2 110				
Litter			4"	1 1/2	3"	4"	2 1/2	3"	3"	3"	1"	3 1/2			
Canopy			60	0	20	65	25	40	30	35	40	50			
Stem			25	69 1/2	36 1/2	23 1/2	30 1/2	31 1/2	34	38	36 1/2	32 1/2			

AVE. DIST. BTW'N TREES:

AVE. B. A.:

TREES/ACRE:

DOM./ACRE:

Plant Ecology Research
TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

Station Number: 25 (4)

Tree Record

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL	F. % TRS	% SUM F. TR.	D. % TRS	DOM% TRS	DFD INDEX	C. I.
			-80	-320	321										
Abies bals			6-35 9 1/2-120	6-100	5' 20	15 82	10 32	12 72	19 46	9 1/2-106	13 92	6-40			
Acer rubru															
A. sacchar															
A. spicatu															
Betula lut															
B. papyrif			14' 115 34' 96	6' 120 12' 35		21 25					11 1/2 109	4' 75			
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau					5' 140	18 106		8' 185 23 156		12 1/2 164	15-46		9' 98		
Pinus Bank							9' 88		12' 120						
P. resinosa									15 1/2 165						
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Picea mar.						6' 87 8' 96	3 1/2 102			5' 106	7' 78	16' 48			
Litter			3"	2"	1 1/2	2"	2"	1"	2"	2 1/2	2	3"			
Canopy			20	45	2	15	3	1	65	3	5	40			
Distance			63 1/2	29	37	48 1/2	57	55 1/2	39 1/2	59 1/2	51	27			

AVE. DIST. BTW'N TREES:

AVE B. A.:

TREES/ACRE:

DOM./ACRE:

Av. canopy 35%

Av. litter - 2.3"

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

Northern Pine-Hardwoods

Sampling Record

Station Number: 25(1)

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL	F. % TRS	% SUM F. TR.	D. % TRS	DOM% TRS	DFD INDEX	C. I.
			-80	-320	321										
Abies bals				13 1/2 15 1/2 4 1/2	15 10 15 14 1/2	4 1/2 3 9 1/2 2 1/2	6 1/2 4 5 1/2 10	9 1/2 11 10 1/2	2 1/2 3	1 1/2 8 1/2 2 1/2	6 1/2 8 1/2 4 4 1/2	8 1/2 15 7 1/2 15	3 1/2 8 3 8		
Acer rubru									14						
A. sacchar															
A. spicatu															
Betula lut															
B. papyrif				17											
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau									12 1/2			3			
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Amodendrus								4					1		
Alnus inc.										10					
Distance				50 1/2	54 1/2	19 1/2	24	34 1/2	32	22 1/2	23	40	15		

AVE. DIST. BTW'N TREES:

AVE. B. A.:

TREES/ACRE:

DOM./ACRE:

Plant Ecology Research
 TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

Sampling Record

Station Number: 25 (2)

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL	F. % TRS	% SUM F. TR.	D. % TRS	DOM% TRS	DFD INDEX	C. I.
			-80	-320	321										
Abies bals				3 3 1/2	3 2	6 2	2 1/2	9 8	9 7 1/2	4 7	1 8	3 4	5 10		
Acer rubru				5 1/2 11 1/2	2 1/2 6	3 1/2 9 1/2	4 1 1/2	11 1/2 9	10 4	2 3 1/2	3 1 1/2	7 1/2 3	9 1/2 13		
A. sacchar															
A. spicatu											3 1/2				
Betula lut															
B. papyrif															
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau															
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Distance				23 1/2	13 1/2	21	24 1/2	37 1/2	30 1/2	16 1/2	23 1/2	17 1/2	37 1/2		

AVE. DIST. BTW'N TREES:

AVE. B. A.:

TREES/ACRE:

DOM./ACRE:

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

Northern Pine-Hardwoods

Sapling Record

Station Number: 25 (3)

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL.	F. % TRS.	% SUM F. TR.	D. % TRS.	DOM% TRS.	DFD INDEX	C. I.
			-80	-320	321										
Abies bals			2-8	1-2	2 1/2	2 1/2	2 1/2	6-18	10 10	9 7	9.4	1 1/2	1 1/2		
Acer rubru			6 1/2	2 1/2	3-	12 1/2	9 1/2	11 1/2	4 4	12 1/2	7.8	6 1/2	12 1/2	4	
A. sacchar															
A. spicatu															
Betula lut															
B. papyrif												2 1/2			
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau								11'							
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Distance			28 1/2	8 1/2	27	24	46 1/2	28	34 1/2	28	32	29 1/2			

AVE. DIST. BTW'N TREES:

AVE B. A.:

TREES/ACRE:

DOM./ACRE:

Plant Ecology Research
 TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

Sapling Record

Station Number: 25(4)

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL	F. % TRS	% SUM F. TR.	D. % TRS	DOM% TRS	DFD INDEX	C. I.
			-80	-320	321										
Abies bals				3' 7 1/2 13 1/2		38	3 1/2	6 6	3 7	16 12	6 8 1/2	9	7 8		
Acer rubru						22	1								
A. sacchar															
A. spicatu				8'								1'			
Betula lut															
B. papyrif												11'			
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau					12 1/2 16							4'			
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Picea mar					5' 9'				9'						
Distance				32	42 1/2	38	33 1/2	25 1/2	29	45	28	31	27 1/2		

AVE. DIST. BTW'N TREES:

AVE B. A.:

TREES/ACRE:

DOM./ACRE:

Data Form No. 84a
TABULATION FORM

Plant Ecology Research
SPRUCE - FIR, SPRUCE - FIR MIXED HARDWOODS

University of Wisconsin
STAND NO. 25

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
<i>Achillea millefolium</i>																							
<i>Actaea pachypoda</i>																							
<i>Actaea rubra</i>																							
<i>Adiantum pedatum</i>																							
<i>Agastache foeniculum</i>																							
<i>Agrimonia gryposepala</i>																							
<i>Agrostis perennans</i>																							
<i>Allium tricoccum</i>																							
<i>Alnus crispa</i>																							
<i>Alnus rugosa</i>	✓																						1
<i>Amphicarpa bracteata</i>																							
<i>Anaphlis margaritacea</i>	✓																						1
<i>Anemone canadensis</i>																							
<i>Anemone cylindrica</i>																							
<i>Anemone quinquefolia</i>	✓								✓									✓				2	10
<i>Anemone virginiana</i>																							
<i>Antennaria spp.</i>																							
<i>Apocynum androsaemifolium</i>	✓																						1
<i>Aquilegia canadensis</i>																							
<i>Aralia hispida</i>																							
<i>Aralia nudicaulis</i>	✓	✓	✓	✓	✓			✓		✓	✓		✓	✓	✓		✓	✓		✓		13	65
<i>Aralia racemosa</i>																							
<i>Arctostaphylos uva-ursi</i>																							
<i>Arenaria lateriflora</i>																							
<i>Arisaema atrorubens</i>																							
<i>Asarum canadense</i>																							
<i>Asclepias exaltata</i>																							
<i>Aster acuminatus</i>																							
<i>Aster ciliolatus</i>																							
<i>Aster furcatus</i>																							
<i>Aster lateriflorus</i>																							
<i>Aster macrophyllus</i>	✓	✓	✓	✓			✓	✓		✓			✓			✓		✓	✓	✓	✓	12	60
<i>Aster nova-angliae</i>																							
<i>Aster paniculatus</i>																							
<i>Aster puniceus</i>																							
<i>Aster sagittifolius</i>																							
<i>Aster umbellatus</i>																							
<i>Athyrium filix-femina</i>																							
<i>Athyrium thelypteroides</i>																							
<i>Botrychium lanceolatum</i>																							
<i>Botrychium lunaria</i>																							
<i>Botrychium matricariaefolium</i>																							
<i>Botrychium multifidum</i>																							
<i>Botrychium virginianum</i>																							
<i>Brachelytrum erectum</i>																							
<i>Caltha palustris</i>																							
<i>Calypso bulbosa</i>																							
<i>Campanula rotundifolia</i>																							
<i>Carex arctata</i>																							
<i>Carex aurea</i>																							
<i>Carex brunnescens</i>																							
<i>Carex canescens</i>																							

OMIT
NEAR 806

	P.									10.								20.	
Carex disperma																			
Carex eburnea																			
Carex intumescens																			
Carex leptalea																			
Carex pedunculata	✓																		1
Carex pensylvanica	✓			✓		✓												2	10
Carex projecta																			
Carex woodii																			
Carex spp.	✓																		1
Caulophyllum thalictroides																			
Celastrus scandens																			
Chamaedaphne calyculata																			
Chimaphila umbellata	✓																		1
Chrysanthemum leucanthemum																			
Chrysosplenium americanum																			
Cicuta maculata																			
Cinna latifolia																			
Circaea alpina																			
Cirsium altissimum																			
Cirsium arvense																			
Cirsium vulgare																			
Claytonia caroliniana																			
Claytonia virginica																			
Clematis virginiana																			
Clematis verticillaris																			
Clintonia borealis	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	20 100
Comandra richardsiana																			
Comandra umbellata																			
Comptonia peregrina																			
Convolvulus spithameus																			
Coptis groenlandicum	✓				✓	✓	✓	✓	✓								✓	6	30
Corallorhiza maculata																			
Corallorhiza striata																			
Corallorhiza trifida																			
Cornus alternifolia																			
Cornus canadensis	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	16 80
Cornus racemosa																			
Cornus rugosa																			
Cornus stolonifera																			
Corydalis sempervirens																			
Corylus americana																			
Corylus cornuta	✓			✓			✓	✓	✓	✓	✓	✓			✓	✓		8	40</

	P.									10.								20.		
Desmodium glutinosum																				
Dicentra canadensis																				
Dicentra cucullaria																				
Diervilla lonicera	✓		✓			✓	✓				✓			✓		✓			6	30
Dirca palustris																				
Dryopteris boottii																				
Dryopteris cristata																				
Dryopteris disjuncta	✓																			1
Dryopteris goldiana																				
Dryopteris marginalis																				
Dryopteris noveboracensis																				
Dryopteris phegopteris																				
Dryopteris spinulosa	✓																			1
Empetrum nigrum																				
Epifagus virginiana																				
Epigaea repens																				
Epilobium angustifolium																				
Epilobium glandulosum																				
Epilobium strictum																				
Equisetum arvense																				
Equisetum pratense																				
Equisetum scirpoides																				
Equisetum sylvaticum																				
Erigeron annuus																				
Erigeron philadelphicus																				
Erigeron strigosus																				
Erythronium albidum																				
Erythronium americanum																				
Eupatorium maculatum																				
Eupatorium perfoliatum																				
Eupatorium purpureum																				
Fagopyrum sagittatum																				
Festuca obtusa																				
Fragaria vesca																				
Fragaria virginiana																				
Galium aparine																				
Galium asprellum																				
Galium boreale																				
Galium concinnum																				
Galium lanceolatum																				
Galium triflorum	✓		✓			✓	✓												2	10
Gaultheria hispidula	✓					✓								✓					2	10
Gaultheria procumbens																				
Gaylussacia baccata																				
Gentiana andrewsii																				
Gentiana crinata																				
Gentiana linearis																				
Gentiana quinquefolia																				
Geocaulon lividum																				
Geranium bicknelli																				
Geranium maculatum																				
Geranium robertianum																				

[illegible]

[illegible]

[illegible]

	P.									10.							20.		
Rubus (dewberry)																			
Rubus (raspberry)																			
Rumex acetosella																			
Salix spp.	✓																		1
Sambucus canadensis																			
Sambucus pubens																			
Sanguinaria canadensis																			
Sanicula gregaria																			
Sanicula marilandica																			
Satureja vulgaris																			
Saxifraga pensylvanica																			
Schizachne purpurascens																			
Scutellaria epilobiifolia																			
Scutellaria lateriflora																			
Senecio aureus																			
Shepherdia canadensis																			
Sium suave																			
Smilacina racemosa																			
Smilacina stellata																			
Smilacina trifolia																			
Smilax herbacea																			
Smilax tamnoides var hispida																			
Spiranthes gracilis																			
Spiranthes romanzoffiana																			
Solidago canadensis																			
Solidago flexicaulis																			
Solidago gigantea																			
Solidago graminifolia																			
Solidago hispida																			
Solidago juncea																			
Solidago lepida																			
Solidago macrophylla																			
Solidago rugosa																			
Solidago ulmifolia																			
Spiraea alba																			
Spiraea latifolia																			
Stachys palustris																			
Stellaria calycantha																			
Stellaria longifolia																			
Stellaria palustris																			
Streptopus amplexifolius																			
Streptopus roseus	✓	✓	✓						✓								✓		4 20
Symphoricarpos albus																			
Symphoricarpos occidentalis																			
Taraxacum officinale																			
Taxus canadensis																			
Thalictrum dasycarpum																			
Thalictrum dioicum																			
Thalictrum polygamum																			
Tiarella cordifolia																			
Trientalis borealis	✓				✓	✓		✓						✓	✓				5 25
Trifolium hybridum																			

	P.									10.								20.	
Trifolium pratense																			
Trifolium repens																			
Trillium cernuum																			
Trillium erectum																			
Trillium grandiflorum																			
Trillium undulatum																			
Uvularia grandiflora																			
Uvularia sessilifolia																			
Vaccinium myrtilloides angustifolium	✓			✓	✓			✓										3	15
Vaccinium cespitosum																			
Vaccinium corymbosum																			
Vaccinium angustifolium myrtilloides	✓	✓	✓							✓	✓		✓		✓		✓	✓	8 40
Vaccinium ovalifolium																			
Vaccinium uliginosum																			
Vaccinium vitis-idaea																			
Veronica officinalis																			
Veronica scutellata																			
Veronica serpyllifolia																			
Viburnum acerifolium																			
Viburnum alnifolium																			
Viburnum cassinoides																			
Viburnum edule																			
Viburnum lentago																			
Viburnum rafinesquianum																			
Viburnum trilobum																			
Vicia americana																			
Viola adunca																			
Viola blanda																			
Viola canadensis																			
Viola conspersa																			
Viola cucullata																			
Viola incognita	✓		✓				✓						✓					3	15
Viola nephrophylla																			
Viola pallens																			
Viola papilionacea																			
Viola pubescens																			
Viola renifolia	✓																		1
Viola selkirkii																			
Viola sororia																			
Vitis riparia																			
Waldsteinia fragarioides																			
Woodsia ilvensis																			
Xanthoxylum americanum																			
Tree Seedlings																			
Abies balsamea	✓	✓		✓	✓		✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	14 70
Acer pensylvanicum																			
Acer rubrum	✓	✓			✓		✓			✓				✓		✓	✓	✓	8 40
Acer saccharum																			
Acer spicatum	✓				✓				✓	✓				✓	✓				5 25

[illegible]

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 25

TREES

✓ *Abies balsamea*
Acer pensylvanicum
 ✓ *Acer rubrum*
Acer saccharum
 ✓ *Acer spicatum*
 ✓ *Amelanchier* spp.
Betula lutea
 ✓ *Betula papyrifera*
Carpinus caroliniana
Crataegus spp.
Fagus grandifolia
Fraxinus americana

Fraxinus nigra
Fraxinus pennsylvanicum
Larix laricina
Ostrya virginiana
 ✓ *Picea glauca*
 ✓ *Picea mariana*
 ✓ *Pinus banksiana*
 ✓ *Pinus resinosa*
 ✓ *Pinus strobus*
Populus balsamifera
 ✓ *Populus grandidentata*
 ✓ *Populus tremuloides*

Prunus nigra
Prunus pensylvanica
Prunus serotina
Prunus virginiana
 ✓ *Pyrus americana*
Pyrus decora
Quercus rubra var. *borealis*
Thuja occidentalis
Tilia americana
Tsuga canadensis
Ulmus americana
Ulmus rubra

SHRUBS

Alnus crispa
 ✓ *Alnus rugosa*
Arctostaphylos uva-ursi
Celastrus scandens
Chamaedaphne calyculata
Comptonia peregrina
Cornus alternifolia
Cornus racemosa
Cornus rugosa
Cornus stolonifera
Corylus americana
 ✓ *Corylus cornuta*
 ✓ *Diervilla lonicera*
Dirca palustris
Empetrum nigrum
Gaylussaccia baccata
Hamamelis virginiana
Ilex verticillata
Juniperus communis
Juniperus horizontalis
 ✓ *Ledum groenlandicum*
Lonicera canadensis
Lonicera dioica

Lonicera hirsutum
Lonicera involucrata
Lonicera oblongifolia
Lonicera villosa
Parthenocissus quinquefolia
Parthenocissus vitacea
Prunus pumila
Pyrus melanocarpa
Rhamnus alnifolia
Rhus glabra
Rhus typhina
Ribes americanum
Ribes cynosbati
Ribes glandulosum
Ribes hirtellum
Ribes lacustre
Ribes oxycanthoides
 ✓ *Ribes triste*
 ✓ *Rosa* sp.
Rubus allegheniensis
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)

✓ *Rubus idaeus*
Rubus parviflorus
 ✓ *Salix* sp.
Sambucus canadensis
Sambucus pubens
Shepherdia canadensis
Smilax tamnoides var. *hispida*
Spiraea alba
Spiraea latifolia
Symphoricarpos albus
Symphoricarpos occidentalis
Taxus canadensis
 ✓ *Vaccinium angustifolium*
 ✓ *Vaccinium myrtilloides*
Vaccinium vitis-idaea
Viburnum acerifolium
Viburnum cassinoides
Viburnum edule
Viburnum lentago
Viburnum rafinesquianum
Viburnum trilobum
Vitis vulpina
Zanthoxylum americanum

HERBS

Achillea millefolium
Actaea pachypoda
Actaea rubra
Adiantum pedatum
Agrimonia gryposepala
Agrostis perennans
Allium tricoccum
Amphicarpa bracteata
 ✓ *Anaphalis margaritacea*
Anemone canadensis
Anemone cylindrica
 ✓ *Anemone quinquefolia*
Anemone virginiana
Antennaria sp.
 ✓ *Apocynum androsaemifolium*
Aquilegia canadensis
 ✓ *Aralia nudicaulis*
Aralia racemosa
Arisaema atrorubens
Asarum canadense
Asclepias exaltata
Aster furcatus
 ✓ *Aster macrophyllus*
Aster nova-angliae
Aster paniculatus

Aster puniceus
Aster sagittifolius
Aster umbellatus
Athyrium filix-femina
Athyrium thelypteroides
Botrychium lunaria
Botrychium matricariaefolium
Botrychium multifidum
Botrychium virginianum
Calypso bulbosa
Campanula rotundifolia
Carex arctata
Carex intumescens
 ✓ *Carex pensylvanica*
Carex woodii
 ✓ *Carex* spp.
 ✓ *Chimaphila umbellata*
Chrysanthemum leucanthemum
Chrysosplenium americanum
Cinna latifolia
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
Clematis virginiana
Clematis verticillaris

✓ *Clintonia borealis*
Comandra richardsiana
Comandra umbellata
 ✓ *Coptis groenlandicum*
Corallorhiza maculata
Corallorhiza striata
Corallorhiza trifida
 ✓ *Cornus canadensis*
Corydalis sempervirens
Cynoglossum officinale
Cypripedium acaule
Cypripedium calceolus var. *pubescens*
Cystopteris fragilis
Dalibarda repens
Desmodium glutinosum
Dicentra canadensis
Dicentra cucullaria
Dryopteris cristata
 ✓ *Dryopteris disjuncta*
Dryopteris goldiana
Dryopteris marginalis
Dryopteris phegopteris
 ✓ *Dryopteris spinulosa*

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

Stand 25

Epigaea repens
 Epilobium angustifolium
 Epilobium glandulosum
 Epilobium strictum
 Equisetum pratense
 Equisetum sylvaticum
 Erigeron annuus
 Erigeron philadelphicus
 Erigeron strigosus
 Erythronium albidum
 Erythronium americanum
 Fragaria vesca
 Fragaria virginiana
 Galium aparine
 Galium boreale
 Galium concinnum
 Galium lanceolatum
 ✓ Galium triflorum
 ✓ Gaultheria hispidula
 Gaultheria procumbens
 Gentiana andrewsii
 Gentiana crinata
 Gentiana quinquefolia
 Geocaulon lividum
 Geranium bicknellii
 Geranium maculatum
 Geum rivale
 ✓ Goodyera repens
 Goodyera tessellata
 Habenaria hyperborea
 Habenaria orbiculata
 Habenaria psycodes
 Habenaria viridis
 Halenia deflexa
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americanum
 Hieracium aurantiacum
 Hieracium canadense
 Hieracium scabrum
 Impatiens capensis
 Iris lacustris
 Isopyrum biternatum
 Lathyrus ochroleucus
 ✓ Linnaea borealis
 Lobelia inflata
 ✓ Lycopodium annotinum
 ✓ Lycopodium clavatum
 Lycopodium clavatum var. megastachyon
 ✓ Lycopodium complanatum
 Lycopodium inundatum

Lycopodium lucidulum
 ✓ Lycopodium obscurum
 Lycopodium obscurum var. dendroideum
 Lycopodium selago
 Lycopodium tristachyum
 Lysimachia ciliata
 Lysimachia quadrifolia
 Lysimachia terrestris
 ✓ Maianthemum canadense
 Malaxis unifolia
 Medeola virginiana
 ✓ Melampyrum lineare
 Mitchella repens
 Mitella diphylla
 Mitella nuda
 ✓ Moneses uniflora
 Monotropa hypopithys
 Monotropa uniflora
 Onoclea sensibilis
 Orchis spectabilis
 Osmorhiza claytoni
 Osmorhiza longistylis
 Osmunda cinnamomea
 ✓ Osmunda claytoniana
 Oxalis montana
 Oxalis stricta
 Panax quinquefolius
 Panax trifolius
 Petasites palmatus
 Phlox divaricata
 Poa compressa
 Poa pratensis
 Polygala paucifolia
 Polygonatum biflorum
 Polygonatum pubescens
 Polymnia canadensis
 Polypodium virginianum
 Potentilla norvegica
 Potentilla simplex
 Potentilla tridentata
 Prenanthes alba
 Primula mistassinaca
 Prunella vulgaris
 ✓ Pteridium aquilinum
 ✓ Pyrola asarifolia
 Pyrola elliptica
 Pyrola minor
 Pyrola rotundifolia
 ✓ Pyrola secunda
 Pyrola virens
 Ranunculus abortivus

Ranunculus acris
 Ranunculus pensylvanicus
 Ranunculus recurvatus
 Ranunculus repens
 Ranunculus septentrionalis
 Rhus radicans
 ✓ Rubus pubescens
 Sanguinaria canadensis
 Sanicula marilandica
 Satureja vulgaris
 Schizachne purpurascens
 Scutellaria epilobiifolia
 Scutellaria lateriflora
 Smilacina racemosa
 Smilacina stellata
 Smilacina trifolia
 Smilax herbacea
 Solidago canadensis
 Solidago flexicaulis
 Solidago graminifolia
 Solidago ulmifolia
 Stellaria calycantha
 Streptopus amplexifolius
 ✓ Streptopus roseus
 Taraxacum officinale
 Thalictrum dioicum
 Thalictrum polygamum
 Tiarella cordifolia
 ✓ Trientalis borealis
 Trillium cernuum
 Trillium erectum
 Trillium grandiflorum
 Trillium undulatum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vicia americana
 Viola adunca
 Viola blanda
 Viola canadensis
 Viola conspersa
 Viola cucullata
 Viola incognita
 Viola nephrophylla
 Viola pallens
 Viola papilionacea
 Viola pubescens
 ✓ Viola renifolia
 Viola selkirkii
 Viola sororia
 Waldsteinia fragarioides

Additional species

Mosses
 Lichenes
 Wide leaf Carex - pedunculata
 Oryzopsis arifolia
 Viola - same - incognita

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 25 (1)

TREE SEEDLINGS

08643/ Abies balsamea
Acer pensylvanicum
0641 Acer rubrum
Acer saccharum
095 Acer spicatum
Betula lutea
/ Betula papyrifera

Fagus grandifolia
Larix laricina
Ostrya virginiana
Picea glauca
Picea mariana
Pinus banksiana
Pinus resinosa

Pinus strobus
Populus tremuloides
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis

743 Pyrus amer

SHRUBS

Alnus rugosa
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
0863 Corylus cornuta
652 Diervilla lonicera
Dirca palustris
Ilex verticillata
Ledum groenlandicum
Lonicera canadensis

Prunus pumila
Pyrus melanocarpa
Ribes cynosbati
Ribes glandulosum
Ribes lacustre
6 Rosa sp.
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
Rubus idaeus

Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
843 Vaccinium angustifolium
21 Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

7 Rubus fruticosus

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
8 Anemone quinquefolia
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
09743 21 Aralia nudicaulis
Arisaema atrorubens
976321 Aster macrophyllus
Athyrium filix-femina
Botrychium virginianum
53 Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
87654321 Clintonia borealis 90
87654 Coptis groenlandicum
Corallorhiza maculata
87654321 Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
Equisetum sylvaticum
Erythronium americanum
Fragaria vesca
Fragaria virginiana
Galium aparine
73 Galium triflorum
5 Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
8762 Linnaea borealis
98761 Lycopodium annotinum
3 Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
962 Lycopodium obscurum
09765431 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
7 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
821 Streptopus roseus
Tiarella cordifolia
754 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides

Additional species

Moss 1234567890
Lichens 1234567890
Orchids 236
Vascular sp 27 - incognita

Pyrola asarifolia 8

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 25 (2)

TREE SEEDLINGS

Abies balsamea
Acer pensylvanicum
Acer rubrum
Acer saccharum
Acer spicatum
Betula lutea
Betula papyrifera

Pinus strobus
Populus tremuloides
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis

6 *Pyrus amer*

SHRUBS

Prunus pumila
Pyrus melanocarpa
Ribes cynosbati
Ribes glandulosum
Ribes lacustre
Rosa sp.
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
Rubus idaeus

Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
Vaccinium angustifolium
Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

097532

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphlis margaritacea
Anemone cylindrica
Anemone quinquefolia
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
Aralia nudicaulis
Arisaema atrorubens
Aster macrophyllus
Athyrium filix-femina
Botrychium virginianum
Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
Clintonia borealis
Coptis groenlandicum
Corallorhiza maculata
Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
Streptopus roseus
Tiarella cordifolia
Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides

0984 *Linnaea borealis*
 94 *Lycopodium annotinum*
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
 87542 *Lycopodium obscurum*
 09865432 *Maianthemum canadense*
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

Additional species

Morpha 134567890
fulgens 134567890
Oxytropis 2
Viola sp 5 - incognita